

# **Syllabus for Two-Year Post Graduate Program Under NEP 2020**

**Department of Economics  
School of Humanities and Social Sciences  
H.N.B. Garhwal University  
Srinagar (Garhwal)**

**Approved by**

**Board of Studies convened on  
30<sup>th</sup> & 31<sup>st</sup> July, 2025  
(For P.G. 2 Year Programme)**

***w.e.f Academic Session 2025-26***

**HNB Garhwal University (A Central University)  
Srinagar Garhwal, Uttarakhand**

## P.G. (First Year)- First semester

Entry requirement	3-year Bachelor's degree (minimum 120 credits) or 4-Year Bachelor's Degree (In case of B.Tech and B.E programme-Minimum-160 credits) and candidates who have met the entrance requirements, including specified levels of attainment, in the programme admission regulations.		
Semester	Course category	Course title	Total Credit
<b>I</b>	<b>Discipline Specific Core</b>	<b>SOS/ECO/CC 101 Advanced Micro Economics-I</b>	5
		<b>SOS/ECO/CC 102 Advanced Macro Economics-I</b>	5
		<b>SOS/ECO/CC 103 Quantitative Methods</b>	5
		<b>SOS/ECO/CC 104 Research Methodology</b>	5
	<b>Discipline Specific Elective</b> (Any 1 out of the following)	<b>SOS/ECO/CC 105 (a) Financial Literacy, Investment and stock markets</b>	4
		<b>SOS/ECO/CC 105 (b) Mathematical Economics-I</b>	
		<b>SOS/ECO/CC 105 (c) Indian Financial System-1</b>	
		<b>SOS/ECO/CC 105 (d) Regional planning and Development</b>	
<b>Total</b>			24

## Second Semester for 2-year P.G. program

Semester	Course category	Course title	Total Credit
II	Discipline Specific Core	SOS/ECO/CC 201 Advanced Micro Economics-II	5
		SOS/ECO/CC 202 Advanced Macro Economics-II	5
		SOS/ECO/CC 203 International Economics	5
		SOS/ECO/CC 204 Project Work	5
	Discipline Specific Elective (Any 1 out of the following)	SOS/ECO/CC 205 (a) Fundamental and Technical analysis of stocks SOS/ECO/CC 205 (b) Mathematical Economics-II SOS/ECO/CC 205 (c) Indian Financial System-II SOS/ECO/CC 205 (d) Sectoral Dynamics of Uttarakhand	4
Total			24
NHEQF Level 6	<i>Student on exit after successfully completing first year of two-year PG programme (i.e., securing minimum required 48 credits will be awarded "Postgraduate Diploma" of one year, in related field/discipline/subject.</i>		

## P.G. (First Year)- First semester

### SOS/ECO/CC 101: Advanced Micro Economics-I

Course Credits	(05) Five
Course Objectives	<ul style="list-style-type: none"> <li>The objective of the course is to help the students to learn the basic and advanced concepts of Micro Economics related to the consumer behaviour, production, cost and decision making under different scenario</li> </ul>
Course Learning outcomes (CLO)	<ul style="list-style-type: none"> <li>The course will help the student to learn the development in the demand theory along with understanding how the production and cost works in the real world. The learner will understand how decisions are taken under the condition of risk and uncertainty and how in real world we could deal with such situations in most efficient manner. The course will overall help the student to understand the economic concepts so that they could associate them with the real-world economic problems.</li> </ul>

#### Unit-1 Theory of Consumer Behaviour

Indifference curve approach; Price, Income and Substitution effects (Hicks and Slutsky); Revealed preference theory; Applications of Indifference Curve Analysis; The Consumer's surplus (Marshall and Hicks). Revision of Demand theory by Hicks

#### Unit-2 Development in Demand theory

Linear expenditure system; Indirect utility function; Theory of consumer demand: Bandwagon effect – Veblen effect – demand and supply equilibrium; Cob-web theorem

#### Unit-3 Production and Costs

Law of variable proportions and Returns-to-scale; Producer's equilibrium; Production functions: Cobb-Douglas and CES functions and their properties. Cost: Cost Functions – short run and long run costs; Average and Marginal Costs; Theory of Long Run costs; Modern theory of Costs

#### Unit-4 Decision under Risk and Uncertainty

ST. Petersburg paradox and Bernoulli's Hypothesis; Utility theory and attitude towards risk; Risk aversion and Insurance; Friedman-Savage Hypothesis; Markowitz Hypotheses; Risk-return trade-off and choice of a portfolio; Linear Programming

#### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

- Ahuja H.L. (2024) *Advanced Economic Theory: Microeconomic Analysis*, Latest Edition, S. Chand and Company Ltd. New Delhi
- Case, Karl E., Ray C. Fair and Sharon E. Oster (2013) *Principles of Economics*, (11th Edition), Prentice Hall of India, New Delhi
- Koutsoyiannis, A. (1990) *Modern Microeconomics*, Macmillan Press Ltd., London
- Layard, P.R.G. and A. W. Walters (1978) *Microeconomic Theory*, McGraw Hill, New York
- Lipsey, R.G. and K.A. Chrystal (2004) *Principles of Economics*, (9th Edition), Oxford University Press, New Delhi
- Perloff, Jeffrey M. (2001) *Micro Economics*, Addison Wesley Longman Pvt. Ltd., New Delhi
- Sen, A. (1999) *Microeconomics Theory and Applications*, Oxford University Press, New Delhi
- Stigler, G. (1996) *Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi
- Varian, H. (2000) *Microeconomic Analysis*, W. W. Norton, New York

## SOS/ECO/CC 102 Advanced Macro Economics-I

Course Credits	(05) Five
Course Objectives	The objective of the course is to help the students to learn the advanced concepts of Macro Economics related to the theories related to the different economic situations along with helping the learners to understand the concept of open economy macroeconomy.
Course Learning outcomes (CLO)	This course will enable students to understand various aggregate economy concepts and analyze the functioning of global economy. They will gain insights into the key factors influencing economic policies. Additionally, students will develop an understanding of national income determinations and open economy macroeconomy, learning how this knowledge contributes to making efficient economic decisions.

### Unit 1: Classical and Keynesian Economics

Classical Doctrine; Say's Law of Market-wage price flexibility, Classical theory of employment; Keynes Theory of Income and Employment, Macro-economic equilibrium: AS-AD model- with variable prices.

### Unit2: Monetarism

Main features of Monetarism; Monetarist approaches to inflation; Structuralist theory of inflation; Okun's Law, Philips curve analysis – Short run and long run Philips curve; NAIRU; natural rate of unemployment; Tobin's modified Philips curve and policies to control inflation. Supply-side Economics.

### Unit 3: New Classical and New Keynesian Economics

Main features and comparison of New Classical and New Keynesian Economics; The new classical macroeconomic approach-Rational expectations-: Meaning and policy implications- Monetary, Fiscal Policy and Business Cycle. New Keynesian Models: Mankiw's New Keynesian Model, Price adjustment and coordination failure.

### Unit 4: Behavioural Economics

Introduction to Behavioural Economics and it's difference between Traditional Economics; Theory of 'Nudge', Practical implications and case studies of 'Nudge'; Theory of 'Commons' and its Policy implications.

### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Mankiw, N. G. (2015), Macroeconomics, 5th Indian Edition, Worth Publishers / Cengage India.
2. Dornbusch, R., S. Fischer, and R. Startz (2018), Macroeconomics, 12th Edition, Tata McGraw-Hill.
3. Blanchard, O. (2017), Macroeconomics, 7th Edition, Pearson India.
4. Romer, D. (2018), Advanced Macroeconomics, 5th Edition, McGraw-Hill India.
5. Froyen, R. T. (2013), Macroeconomics: Theories and Policies, 10th Edition, Pearson India.

## SOS/ECO/CC 103 Quantitative Methods

<b>Course Credits</b>	<b>(05) Five</b>
<b>Course Objectives</b>	The objective of the course is to help the students to learn the basic concepts of Mathematical Economics and apply the quantitative tools and techniques in economic theories. Also to understand and develop skills of analysis using the quantitative methods for minimisation and maximisation etc.
<b>Course Learning outcomes (CLO)</b>	The course will help the student to understand various concepts relating to Mathematical Economics and to apply the quantitative tools and techniques for optimisation purposes. They will be able to apply different quantitative tools for decision making purposes.

**Unit-1:** Statistical inference: Parametric and Non-Parametric test, Assumption of Normality; Hypothesis-Meaning, types; Formulation and testing of Hypothesis; Type I and Type II errors; Chi-square tests, t-test, Z-test, and F-test.

**Unit-2:** Role of Mathematics in economic theory and its limitations; Differentiation: meaning and rules of simple differentiation, partial and total differentiation, concept of maxima & minima in single and multivariate functions; rules of indefinite integration and definite integration.

**Unit-3:** Applications of the differentiation and integration in Economics: Concavity and Convexity; Optimization of Functions; Marginal Concepts; Optimizing Economic Functions; Price Elasticity of Demand and Supply; Relationship among Total, Marginal and Average Concepts.

**Unit-4:** Matrix and Determinants: meaning and types; Simple operations on matrices; Basic properties of determinants, Solution of simultaneous equations with determinant method.

### **Teaching Learning Process: Lectures and tutorials**

### **Suggested Readings:**

1. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
2. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Gupta, S.C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.
4. Handry, A.T. (1999), Operations Research, Prentice Hall of India, New Delhi.
5. Monga, G.S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
6. Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
7. Taha, H.A. (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
8. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

## SOS/ECO/CC 104 Research Methodology

<b>Course Credits</b>	<b>(05) Five</b>
<b>Course Objectives</b>	This course aims at empowering students with knowledge and ability to generate requisite information for decision making through carrying out effective research. Students will learn various tools and techniques necessary to create knowledge and information that will aid in decision making.
<b>Course Learning outcomes (CLO)</b>	This course will help students to understand basics of research i.e., research, research types, approaches, concepts etc. This will also help to learn and carry out effective research using exploratory, descriptive and experimental designs Also to develop an acumen to prepare an appropriate research design for given research.

**Unit-1:** Research: Meaning, Objectives, Importance and Types; Research process; Research Problem, Research Design and Sampling Design; Sampling Methods.

**Unit-2:** Methods for collection of Primary Data; Sources of Secondary Data; Drafting of Questionnaires and Schedules; Measurement and Scaling.

**Unit-3:** Hypothesis: Meaning, Formulation and Testing; Z, t, F and Chi-square tests.

**Unit-4:** Data Processing, Interpretation and Report writing, Basic use of MS Office in Research.

### **Teaching Learning Process: Lectures and tutorials**

### **Suggested Readings:**

1. Business Research Methods, Donald R Cooper, McGraw Hill, New Delhi
2. Research Methodology, Cauvery.R, Sudhanayak U.K, Girija.M and Meenakshi.R, S.Chand & Company Ltd, New Delhi.
3. Research Methodology: A Guide for Researchers in Management and Social Sciences, Bill Taylor, Gautam Sinha, Taposh Ghoshal, Prentice-Hall of India Private Limited, New Delhi
4. Research Methodology: Methods and Techniques, C.R. Kothari, New Age International, New Delhi
5. Statistical Methods, 2004, S.P. Gupta, S.Chand publication, New Delhi Statistical Methods, D.R. S.P. Gupta, Sultan Chand & Sons, New Delhi Statistics for Management, Levin and Rubin, Asian Publishing House, New Delhi

## **SOS/ECO/EC/105 (a) Financial Literacy, Investment and stock markets**

<b>Course Credits</b>	<b>(04) Four</b>
<b>Course Objectives</b>	The objective of the course is to equip learners with the essential skills to make informed financial and investment decisions, ensuring financial security and wealth creation.
<b>Course Learning outcomes (CLO)</b>	The course will help the student to understanding of fundamental financial concepts, investment strategies, and stock market mechanisms. They will gain proficiency in managing personal finances, budgeting, saving, and understanding the impact of financial decisions on life. They will understand the structure and functioning of the stock market, including primary and secondary markets, stock exchanges, mutual funds, and different financial instruments. Furthermore, students will analyse macroeconomic factors affecting the stock market, comprehend the correlation between economic indicators and market movements, and assess the impact of global economic trends on the Indian stock market. This course will equip learners with the essential skills to make informed financial and investment decisions, ensuring financial security and wealth creation.

### **Unit-1 Financial Literacy**

Meaning and Importance of Financial literacy; Basics of Money Management; Impact of Financial Decisions on Life; Identifying Financial Goals: Short-Term vs. Long-Term; How to Creating Personal Budget; Importance of Saving and Emergency Funds; Rules of Budgeting; banking and Digital payments; Credit Score; Importance of Managing debt; Insurance for financial security; Income tax slabs and exemptions available under present financial year income tax structure; Time Value of Money; LTCG and STCG tax in India

### **Unit-2 Investment and Stock Market**

Importance of Investment; Difference between Saving and investment; power of compounding; Risk in investing: Factors determining the risk of investment in secondary market, Measuring Volatility through standard deviation, India Volatility Index, Beta; Determinants of rate of return; Risk and return relationship; calculation and usage of Reward to Risk Ratio (RRR); Key features of portfolio management, The choice of an investment portfolio

### **Unit-3 Basics of Stock Market**

Primary and Secondary market- IPO and Stock market; Working of stock market- stock exchanges, stock brokers, depositories; types of instruments available in stock market; different categories of stocks; Stock market indexes; Nifty 50, Bank Nifty etc Exchange traded funds; contract notes; GTD (good till date/day/time) in stock market; Mutual funds: Meaning, types and identifying a good mutual fund

### **Unit-4 Macro-Economic Analysis and stock market**

Association of Economic status of the country and stock markets; Understanding the correlation of economic parameters and stock market: GDP, IIP, Inflation, CRR, Unemployment, Budget, Monsoon, Demographic factors etc; Understanding the impact of International economic issues/parameters and their impact on Indian stock market; impact of international stock market on Indian stock market

**(Students will have to do an analysis of any four major economic events which have huge impact on the Nifty 50 index)**



## Suggested Readings

1. Halan, M. (2018). *Let's talk money: You've worked hard for it, now make it work for you*. HarperCollins India.
2. Lamba, A. (2019). *Financial affairs of the common man: Master the art of personal finance management*. Penguin Books.
3. Subramanyam, P. V. (2014). *Retire rich: Invest ₹40 a day*. TV18 Broadcast Ltd.
4. Kumar, A. (2017). *The richest engineer: The story of a young engineer who becomes a millionaire*. Notion Press.
5. Subramanyam, P. V., & Pattabiraman, M. (2016). *You can get rich too: With goal-based investing*. TV18 Broadcast Ltd.
6. Kiyosaki, R. T. (1997). *Rich dad poor dad: What the rich teach their kids about money*.
7. Clason, G. S. (1926). *The richest man in Babylon*. Penguin Books.
8. Ramsey, D. (2003). *The total money makeover: A proven plan for financial fitness*. Thomas Nelson.
9. Robin, V., & Dominguez, J. (1992). *Your money or your life: Transforming your relationship with money and achieving financial independence*. Penguin Books.
10. Gala, J., & Gala, A. (2020). *Guide to Indian stock market*. Buzzingstock Publishing House.
11. Kejriwal, A. (2022). *Fundamental analysis for investors*. Vision Books.
12. Graham, B. (2006). *The intelligent investor: The definitive book on value investing*. HarperBusiness Essentials.
13. O'Neil, W. J. (2009). *How to make money in stocks: A winning system in good times and bad* (4th ed.). McGraw-Hill Education.
14. Pring, M. J. (2002). *Technical analysis explained: The successful investor's guide to spotting investment trends and turning points* (4th ed.). McGraw-Hill Education.
15. Wyss, B. O. (2001). *Fundamentals of the stock market*. McGraw-Hill Education.
16. Murphy, J. J. (1999). *Technical analysis of the financial markets: A comprehensive guide to trading methods and applications*. New York Institute of Finance.

## **SOS/ECO/EC/105 (b) Mathematical Economics-I**

### **Swayam Course**

[https://onlinecourses.swayam2.ac.in/cec25\\_mg20](https://onlinecourses.swayam2.ac.in/cec25_mg20)

## SOS/ECO/EC/105 (c) Indian Financial System-I

Course Credits	(04) Four
Course Objectives	The aim of the course is to help the students understand the structure, components, and functioning of the Indian financial system with a special emphasis on financial markets, banking institutions, and regulatory frameworks that govern the system.
Course Learning outcomes (CLO)	The course will help students gain comprehensive knowledge about the evolution and current state of the Indian financial system. Learners will understand the role and functions of key financial institutions, markets, and regulatory bodies. Students will develop analytical skills to evaluate financial instruments, banking operations, and monetary policies in the Indian context. This knowledge will enable them to connect theoretical concepts with real-world financial scenarios and prepare them for careers in banking, financial services, and regulatory bodies.

### Unit-1 Introduction to Indian Financial System

Structure and components of the Indian financial system; Financial intermediation; Financial deepening and financial inclusion; Role of finance in economic development; Digital transformation of the financial system.

### Unit-2 Financial Markets in India

Money market: Structure, instruments, and operations; Capital market: Primary and secondary markets; Government securities market; Corporate debt market; Derivatives market; Foreign exchange market; Integration of financial markets

### Unit-3 Banking System in India

Meaning and Functions of Commercial Banks, Regional Rural Banks, Cooperative Bank, Small Finance Banks and Payment Banks; Priority sector lending; non-performing assets; Insolvency and Bankruptcy code 2016; Financial technology in banking.

### Unit-4 Reserve Bank of India and Monetary Policy

Functions of RBI; Monetary policy meaning, instruments and objectives; inflation targeting framework. Monetary Policy Committee (MPC)-role and function.

### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Bhole, L.M. and Mahakud, J. (2017) **Financial Institutions and Markets: Structure, Growth and Innovations**, McGraw Hill Education, New Delhi
2. Khan, M.Y. (2018) **Indian Financial System**, McGraw Hill Education, New Delhi
3. Machiraju, H.R. (2020) **Indian Financial System**, Vikas Publishing House, New Delhi
4. Pathak, Bharati V. (2021) **The Indian Financial System: Markets, Institutions and Services**, Pearson Education, New Delhi
5. Srivastava, R.M. and Nigam, D. (2016) **Financial Markets and Institutions**, Himalaya Publishing House, Mumbai
6. Machiraju, H.R. (2018) **Working of Stock Exchanges in India**, New Age International Publishers, New Delhi
7. Report on Currency and Finance (Latest), Reserve Bank of India, Mumbai
8. Report on Trend and Progress of Banking in India (Latest), Reserve Bank of India, Mumbai
9. Annual Report (Latest), Securities and Exchange Board of India, Mumbai

## SOS/ECO/EC/105 (d) Regional Planning and Development

Course Credits	(04) Four
Course Objectives	The objective of this course is to provide a comprehensive understanding of regional economics, planning approaches, and development theories while analysing regional disparities and policies. It aims to equip students with the knowledge of sustainable regional planning strategies, governance frameworks, and contemporary development programs, with a special focus on India, including Uttarakhand.
Course Learning outcomes (CLO)	By the end of this course, students will develop a strong foundation in regional economics, planning approaches, and development theories. They will be able to differentiate between regional and national economics, understand various types of regions, and assess factors influencing regional development. Students will gain proficiency in analyzing regional disparities using economic indicators and quantitative methods. They will also explore traditional and modern approaches to regional planning, including participatory and sustainable strategies. Additionally, students will critically evaluate India's regional development policies, governance frameworks, and special initiatives, with a focus on addressing regional imbalances and promoting sustainable growth.

### Unit- 1: Regional Economics and Concept of Region

Definition and scope of regional economics; Importance of regional economic analysis, Differences between regional and national economics; Differences between regional and urban planning Meaning and characteristics of a region, Types of regions in planning; Factors Influencing Regional Development; Measurement of Regional Disparities: Indicators of regional economic disparities; Methods to measure regional inequalities.

### Unit – 2: Methods and Approaches to Regional Planning

Traditional Approaches to Regional Planning: Sectoral Planning Approach, Spatial Planning Approach, Integrated Planning Approach; Participatory and Sustainable Planning Approaches: Bottom-Up and Community-Based Planning, Public-Private Partnerships (PPP), Sustainable Regional Development Models, Resilience Planning and Climate Adaptation Strategies, Tools and Techniques in Regional Planning: Gini Coefficient and Theil Index, GIS, Remote Sensing and Scalo-gram techniques.

### Unit – III: Regional Planning and Development Theories

Growth pole theory; Central Place theory, Core-Periphery Model, Cumulative Causation Theory, Location Theory, Dependency Theory, Endogenous Growth Theory, Territorial Development Model.

### Unit – IV Regional Development Policies and Programs

Decentralized Planning and Governance- Panchayati Raj System in India; Special Economic Zones (SEZs) and Industrial Corridors; Special Regional Planning Initiatives: Special Economic Zones (SEZs) and their impact, Backward Region Grant Fund (BRGF), Aspirational Districts Programme (ADP), Tribal Area Development Programs, Hill Area Development Program (HADP) and Desert Development Program (DDP), Vibrant villages programme; Rural development programs: PURA, RURBAN; Challenges in Regional Planning in India.

### Suggested Readings:

1. Christaller, W. (1933). *Central places in Southern Germany*. Prentice Hall (English Translation, 1966).
2. Friedmann, J., & Alonso, W. (Eds.). (1975). *Regional policy: Readings in theory and applications*. MIT Press.
3. Fujita, M., Krugman, P., & Venables, A. J. (1999). *The spatial economy: Cities, regions, and international trade*. MIT Press.
4. GIS Development. (2007). *Geoinformatics for regional development: Issues and applications*. GIS Development.
5. Government of India. (2005). Special Economic Zones (SEZ) in India: Policies, performance, and challenges. Ministry of Commerce and Industry.
6. Hall, P. (2002). *Urban and regional planning (4th ed.)*. Routledge.
7. Hall, P., & Pain, K. (2006). *The polycentric metropolis: Learning from mega-city regions in Europe*. Earthscan.
8. Harris, C. D. (1954). *The market as a factor in the localization of industry in the United States*. *Annals of the Association of American Geographers*, **44**(4), 315-348.
9. Hirschman, A. O. (1958). *The strategy of economic development*. Yale University Press.
10. Isard, W. (1975). *Introduction to regional science*. Prentice Hall.
11. McKee, R., Dean, J. M., & Leahy, W. H. (1970). *Regional economics: Theory and practice*. Free Press.
12. Mishra, R. P., Sundaram, K. V., & Others (Eds.). (1975). *Regional planning and national development*. Vikas.
13. Myrdal, G. (1957). *Economic theory and underdeveloped regions*. Harper & Row.
14. NITI Aayog. (2018). Aspirational districts programme: An overview. Government of India.
15. Perroux, F. (1950). *Economic space: Theory and applications*. *The Quarterly Journal of*
16. Planning Commission. (2014). Evaluation study of the Backward Region Grant Fund (BRGF) scheme. Government of India.
17. Porter, M. E. (1990). *The competitive advantage of nations*. Free Press.
18. Richardson, H. W. (1969). *Elements of regional economics*. Penguin.
19. Sen, A. (1999). *Development as freedom*. Oxford University Press.
20. Singh, K., & Bhattacharya, P. (2019). Rural development programmes in India: Strategies and implementation. Sage Publications.
21. Smith, D. M. (1971). *Industrial location: An economic geographical analysis*. John Wiley & Sons.

## Semester-II

### SOS/ECO/CC 201 Advanced Micro Economics-II

Course Credits	(05) Five
Course Objectives	The objective of the course is to help the students to learn the basic and advanced concepts of Micro Economics related to the theories related to the different market conditions along with helping the learners to understand the concept of welfare and market failures
Course Learning outcomes (CLO)	This course will enable students to understand various market conditions and analyze the functioning of real-world markets. They will gain insights into the key factors influencing major business decisions. Additionally, students will develop an understanding of welfare economics and market failures, learning how this knowledge contributes to making efficient economic decisions.

#### Unit-1 Price and Output Determination in Markets

Perfect Competition: Equilibrium, Monopoly- Profit maximization, monopoly and social welfare: dead-weight loss; price discrimination and social welfare and dumping; Monopolistic competition: equilibrium, excess capacity.

#### Unit-2 Theories of the market and Firm

Oligopoly: Price Rigidity, Cartels, Cournot's and Chamberlin's Model; Game theory: Dominant Strategy, Neumann-Morgenstern theory, The Prisoners' Dilemma; Theories of the firm: Managerial-Williamson's and Baumol's Sales revenue maximisation theory; Limit Pricing- J.S Bain.

#### Unit-3 Welfare Economics

Concept of social welfare, Pareto optimality criterion and efficiency conditions, Kaldor-Hicks Criterion: Compensation principle, Bergson-Samuelson Social welfare function; Arrows Impossibility Theorem, Amartya Sen's Possibility Theorem.

#### Unit-4 Market Failures

Sources of Market failures and their implications, Externalities, Public Goods and Market failure, Information problem, Asymmetric information, Moral Hazard; Market signalling.

#### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Ahuja H.L. (2016) *Advanced Economic Theory: Microeconomic Analysis*, 20th Edition, S. Chand and Company Ltd. New Delhi
2. Case, Karl E., Ray C. Fair and Sharon E. Oster (2013) *Principles of Economics*, (11th Edition), Prentice Hall of India, New Delhi
3. Koutsoyiannis, A. (1990) *Modern Microeconomics*, Macmillan Press Ltd., London
4. Layard, P.R.G. and A. W. Walters (1978) *Microeconomic Theory*, McGraw Hill, New York
5. Lipsey, R.G. and K.A. Chrystal (2004) *Principles of Economics*, (9th Edition), Oxford University Press, New Delhi
6. Perloff, Jeffrey M. (2001) *Micro Economics*, Addison Wesley Longman Pvt. Ltd., New Delhi
7. Sen, A. (1999) *Microeconomics Theory and Applications*, Oxford University Press, New Delhi

8. Stigler, G. (1996) *Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi
9. Varian, H. (2000) *Microeconomic Analysis*, W. W. Norton, New York

## SOS/ECO/CC 202 Advanced Macro Economics-II

Course Credits	(05) Five
Course Objectives	The objective of the course is to help the students to learn the advanced concepts of Post Keynesian Macro Economics such as Monetarism, Supply Side Economics, New Classical Economics along with helping the learners to understand the Business cycle theory for stabilized economic growth.
Course Learning outcomes (CLO)	This course will enable students to understand the detailed intricates of business cycles in long run equilibrium and analyze the contributions of Post Keynesian Theories in Macroeconomic analysis. Additionally, students will develop an understanding of macroeconomics policy and stabilization strategies through IS-LM Model, learning how this knowledge contributes to making efficient economic decisions.

### Unit 1: Income-Consumption and Investment Theories

Psychological law of consumption; Relative Income hypothesis; Permanent Income hypothesis; Life Cycle hypothesis; Determinants of Investment: MEC, Investment multiplier and limitations; Accelerator: concept and working; Interaction of multiplier and accelerator; Investment behavior – influence of policy measures on investment, Tobin's q theory of investment; impact of inflation on consumption and investment.

### Unit-2: Neo Classical Synthesis and Interaction of Monetary and Fiscal Policy

IS-LM model: The interaction of Real and Monetary sectors of the economy – Keynesian version of the IS-LM model – Neo-classical version of the IS-LM model; Fiscal and Monetary Policy analysis in an IS-LM model; Short run and long run Aggregate Supply curve analysis.

### Unit-3: Business Cycles

Business cycles: Meaning, phases and features; Theories of business cycles: Hawtrey theory, Over-investment theory, Keynes theory, Samuelson model, Schumpeter model and Hick's theory; Control of business cycles, relative effectiveness of monetary and fiscal policies. Fiscal policy and crowding out and crowding in. Real Business Cycle (RBC) theory.

### Unit 4: The Open Economy

Concept of openness in goods market, factor market, and financial market; Foreign Trade Multiplier, Open Economy- Mundell-Fleming Model, Purchasing Power Parity (PPP), Interest Rate Parity (IRP) and Forex Market Efficiency, Exchange Rate Mechanisms, Interest Rate Differentials and Capital Flows, Dollar Index, Crude prices, Carry Trade and its impact.

### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Mankiw, N. G. (2015), Macroeconomics, 5th Indian Edition, Worth Publishers / Cengage India.
2. Dornbusch, R., S. Fischer, and R. Startz (2018), Macroeconomics, 12th Edition, Tata McGraw-Hill.
3. Blanchard, O. (2017), Macroeconomics, 7th Edition, Pearson India.
4. Romer, D. (2018), Advanced Macroeconomics, 5th Edition, McGraw-Hill India.

5. Froyen, R. T. (2013), Macroeconomics: Theories and Policies, 10th Edition, Pearson India.

## SOS/ECO/CC 203 International Economics

Course Credits	(05) Five
Course Objectives	The objective of the course is to help the students understand the fundamental concepts and theories of international trade and finance, starting from the basics and progressing to more complex aspects of global economic relationships, trade policies, exchange rates, and international monetary systems
Course Learning outcomes (CLO)	The course will enable students to comprehend the basic principles of international trade and their applications to real-world economic scenarios. Learners will develop analytical skills to evaluate the rationale for trade, trade patterns, exchange rate mechanisms, and balance of payments. Students will gain insights into the functioning of global markets, trade policies, and international financial systems. This knowledge will prepare them to understand contemporary global economic challenges and contribute to international economic policy discussions.

### Unit-1 Introduction to International Trade

Meaning and significance of International Economics; Basis of International Trade; Differences between intranational and international trade; Importance of international trade in economic development; Measures of international trade: exports, imports, trade balance, and trade intensity; Globalization and changing patterns of trade; Introduction to gains from trade.

### Unit-2 Theories of International Trade

Classical theories: Absolute advantage (Adam Smith), Comparative advantage (Ricardo), Reciprocal theory (J. S. Mill); Heckscher-Ohlin Theory, Leontief Paradox, Factor price equalization; Product cycle theory, Prebisch-Singer hypothesis, Stolper-Samuelson, Rybczynski Theorem.

### Unit-3 Trade Policy

Free trade vs. protectionism; Arguments for and against free trade; Instruments of trade policy: Tariffs, quotas, subsidies, and non-tariff barriers; Effects of tariffs and quotas on prices, production, consumption, and welfare; Terms of trade: Concepts and measurements; Trade policy in developing vs. developed countries.

### Unit-4 Balance of Payment, International Economic Institutions and Exchange Rate

Balance of payments adjustment mechanism under fixed and flexible exchange rate; Foreign exchange markets; Determination of exchange rates; Exchange rate systems: Fixed, flexible, and managed; IMF and SDR International reserves; Balance of payments adjustments Evolution of international trading system: WTO, BRICS, ASEAN, G7, G20.

### Teaching-Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Salvatore, D. (2019) International Economics, Wiley, New York
2. Krugman, P.R., Obstfeld, M. and Melitz, M.J. (2018) International Economics: Theory and Policy, Pearson Education, New Delhi
3. Carbaugh, R.J. (2019) International Economics, Cengage Learning, Boston
4. Appleyard, D.R. and Field, A.J. (2017) International Economics, McGraw Hill Education, New York
5. Sodersten, B. and Reed, G. (1994) International Economics, Palgrave Macmillan, London



6. Pugel, T.A. (2020) International Economics, McGraw Hill Education, New York
7. Sen, S. (2010) International Trade Theory and Policy: A Review of the Literature, Levy Economics Institute Working Paper No. 635
8. World Trade Organization (Latest) World Trade Report, WTO, Geneva
9. IMF (Latest) Balance of Payments Manual, International Monetary Fund, Washington D.C.

## **SOS/ECO/EC/204 PROJECT WORK**

**Course Title: Project Work**

**Credits: 5 (Five)**

**Maximum Marks: 100**

Note: Any student can elect the field study or Project Work course. Student electing the course have to undergo a Seven days field study. The field study will aim at studying the major issues and problems related to different sectors of economy of India and Uttarakhand. The study will largely be based on the collection of primary data and observation. At the end of the field study the student have to submit a field study Report to the department.

Method of Evaluation:

Performance of student in project work will be evaluated on the following three basis:

<i>(a) Project Report (By external and internal experts)</i>	<i>60 Marks</i>
<i>(b) Viva-voce (By external expert)</i>	<i>20 Marks</i>
<i>(c) Periodical presentation (by supervisor-internal expert)</i>	<i>20 Marks</i>
<i>Total:</i>	<i>100 Marks</i>

Note: Name of the external expert will be decided by the University.

## SOS/ECO/EC/205 (a) Fundamental and Technical analysis of stocks

Course Credits	(04) Four
Course Objectives	The objective of the course is to equip students with the basic knowledge and skills to do fundamental and technical analysis for informed investment and trading decisions in the stock market.
Course Learning outcomes (CLO)	The course will help the students to develop a comprehensive understanding of stock valuation and market trends. They will learn to analyse industries, assess company fundamentals, and interpret financial statements using key ratios. Additionally, students will gain proficiency in technical analysis, including chart patterns, candlestick formations, support and resistance levels, and market phases. The course will also cover indicators like SMA, EMA, MACD, and RSI, enabling students to identify breakouts, trends, and execute informed trading decisions.

### Unit-1 Fundamental Analysis: Industry Analysis and stock market

Meaning and importance of fundamental analysis; types of industries: Growth industry, cyclical industry, Defensive industry, Cyclical growth industry; Industry Life Cycle, SWOT Analysis; **Company analysis:** General Analysis- Competitive Edge of the company; Earnings of the Company and the Management;

### Unit-2 Fundamental Analysis: Financial analysis

Understanding stock Balance Sheets, Income statement, Cash flow statement, financial ratios, Debt-equity ratio, profitability ratio, Valuation ratios

### Unit-3 Basics of technical Analysis and Price Action

Types of charts with emphasis on Candle stick; Dow Theory: Phases of market- Accumulation phase, Markup phase, Distribution phase; Support and Resistance; Types of Candlesticks: Single Candlestick- Bullish & Bearish Marubozu, Hammer & Hanging man; Inverted hammer & Shooting star; Dragonfly Doji and Gravestone Doji; Double Candlestick- Bullish and Bearish Engulfing, Bullish and Bearish Harami; Three Candlestick- Morning and evening star

### Unit-4 Indicators and chart patterns for technical analysis

Use of different time frames for Stock technical analysis; Identification and confirmation of Breakout and Breakdown; Use of Trend line, channel lines, Use of SMA, EMA, MACD, RSI, Volume based strategy

Chart patterns: Bullish: Inverted Head and Shoulder, Double bottom, Inverted Pole and Flag, Cup and handle, Bearish: Head and Shoulder, Double top, Inverted Pole and Flag rounding pattern; Others: Ascending and descending triangles breakout / breakdown; Swing trading

**(Students will have to do fundamental and technical analysis of any three large cap industries listed in Nifty 50 index)**

### Suggested Readings

1. Halan, M. (2018). *Let's talk money: You've worked hard for it, now make it work for you*. HarperCollins India.
2. Lamba, A. (2019). *Financial affairs of the common man: Master the art of personal finance management*. Penguin Books.
3. Subramanyam, P. V. (2014). *Retire rich: Invest ₹40 a day*. TV18 Broadcast Ltd.
4. Kumar, A. (2017). *The richest engineer: The story of a young engineer who becomes a millionaire*. Notion Press.

5. Subramanyam, P. V., & Pattabiraman, M. (2016). *You can get rich too: With goal-based investing*. TV18 Broadcast Ltd.
6. Kiyosaki, R. T. (1997). *Rich dad poor dad: What the rich teach their kids about money*.
7. Clason, G. S. (1926). *The richest man in Babylon*. Penguin Books.
8. Ramsey, D. (2003). *The total money makeover: A proven plan for financial fitness*. Thomas Nelson.
9. Robin, V., & Dominguez, J. (1992). *Your money or your life: Transforming your relationship with money and achieving financial independence*. Penguin Books.
10. Gala, J., & Gala, A. (2020). *Guide to Indian stock market*. Buzzingstock Publishing House.
11. Kejriwal, A. (2022). *Fundamental analysis for investors*. Vision Books.
12. Graham, B. (2006). *The intelligent investor: The definitive book on value investing*. HarperBusiness Essentials.
13. O'Neil, W. J. (2009). *How to make money in stocks: A winning system in good times and bad* (4th ed.). McGraw-Hill Education.
14. Pring, M. J. (2002). *Technical analysis explained: The successful investor's guide to spotting investment trends and turning points* (4th ed.). McGraw-Hill Education.
15. Wyss, B. O. (2001). *Fundamentals of the stock market*. McGraw-Hill Education.
16. Murphy, J. J. (1999). *Technical analysis of the financial markets: A comprehensive guide to trading methods and applications*. New York Institute of Finance.

Students may refer to NSE website for more contents: [www.nseindia.com](http://www.nseindia.com)

## SOS/ECO/EC/205 (b) Mathematical Economics-II

Course Credits	(04) Four
Course Objectives	This course introduces the learners to basic mathematical concepts, tools and techniques, and also discusses how these techniques are applied to economic analysis
Course Learning outcomes (CLO)	The students also learn to think about the appropriate mathematical tool to apply to a given economic phenomenon or process or idea. The course discusses functions of several variables, differential equations. The students also learn about linear algebra Finally, the students are exposed to multi variate optimisation.

### Unit 1 Input Output Analysis

Definition of Input-Output technique, Inter-Industry analysis, Leontief Input-Output Model, Open Input-Output Model.

### Unit 2 Linear Programming

Meaning and concepts of Linear Programming problem (LPP), slack, surplus, artificial variables, formulation of a LPP, general form of a LPP, standard form of a LPP, solution of a LPP: graphical and simplex method, applications of Linear Programming technique.

### Unit 3 Differential Equation

First-Order Differential Equations; Second-Order Differential Equations

### Unit 4 Difference Equation

Solving first order difference equation, Cobb Web Model- Dynamic stability of equilibrium.

### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
2. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Gupta, S.C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.
4. Handry, A.T. (1999), Operations Research, Prentice Hall of India, New Delhi.
5. Monga, G.S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
6. Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
7. Taha, H.A. (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
8. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.

## SOS/ECO/EC/205 (c) Indian Financial System-II

Course Credits	(04) Four
Course Objectives	The objective of the course is to help students develop advanced understanding of financial institutions, risk management, regulatory frameworks, and contemporary issues in the Indian financial system, along with providing insights into international financial linkages and fintech developments
Course Learning outcomes (CLO)	This course will enable students to critically analyze the operations and regulations of various non-banking financial institutions and regulatory bodies in India. They will gain expertise in understanding financial risks, their management techniques, and governance issues. Students will develop the ability to evaluate India's position in the global financial system and assess the impact of financial technology innovations. Additionally, they will learn to apply theoretical knowledge to address real-world financial challenges and policy issues in the Indian context.

### Unit-1 Non-Banking Financial Institutions

Meaning and importance of NBFCs; Development Financial Institutions; Insurance companies; Pension funds; Mutual funds; Non-Banking Financial Companies (NBFCs); Microfinance Institutions; Asset Reconstruction Companies; Credit Rating Agencies; Operations, regulations, and challenges

### Unit-2 Financial Regulation and Governance

Financial sector regulators and their functions: SEBI, IRDAI, PFRDA, NSDL; Financial sector legislation; Corporate governance in financial institutions; Financial market infrastructure; Financial stability and systemic risk; Financial sector reforms and liberalization post 1991.

### Unit-3 Risk Management in Financial Institutions

Types of financial risks: Credit risk, market risk, operational risk, liquidity risk; Risk management frameworks; Asset-liability management; Capital adequacy norms; Basel norms and their implementation in India; Stress testing; Financial contagion. India and global financial market -role, impact, merits and demerits of FIIs and FDI; Financial crimes and their prevention.

### Unit-4 Contemporary Issues in Indian Financial System

Financial technology (Fintech) and digital finance; Financial inclusion-meaning and significance; Financial Inclusion drives in India from year 2000- strategies and challenges; Sustainable finance and ESG investments; Recent innovations in Indian financial system- SPV and SPE.

### Teaching Learning Process: Lectures and tutorials

#### Suggested Readings:

1. Bhole, L.M. and Mahakud, J. (2017) Financial Institutions and Markets: Structure, Growth and Innovations, McGraw Hill Education, New Delhi
2. Financial Stability Report (Latest), Reserve Bank of India, Mumbai
3. Ghosh, S. (2019) Indian Banking and Financial System, McGraw Hill Education, New Delhi
4. Khan, M.Y. (2018) Indian Financial System, McGraw Hill Education, New Delhi
5. Machiraju, H.R. (2020) Indian Financial System, Vikas Publishing House, New Delhi
6. Mohan, R. and Ray, P. (2019) Indian Financial Sector: Structure, Trends and Turns, Palgrave Macmillan, Singapore

7. Nayak, S. (2018) Inclusive Finance India Report, Access Development Services, New Delhi
8. Pathak, Bharati V. (2021) The Indian Financial System: Markets, Institutions and Services, Pearson Education, New Delhi

## **SOS/ECO/EC/205 (d) Sectoral Dynamics of Uttarakhand**

<b>Course Credits</b>	<b>(04) Four</b>
<b>Course Objectives</b>	<b>The objective of the course is to help the students to have a broad understanding of Uttarakhand's economy, socio-economic development its resources, development challenges, and comparative advantages. The course will help students understand local economic development issues</b>
<b>Course Learning outcomes (CLO)</b>	<b>This course will enable students to develop overall understanding of the macroeconomic indicators of the state, the main issues that act as constraints for development, and the key advantages of the Himalayan state. The students will understand the regional disparities in development, gaps in skill, and scope in each sector. The students will have an in-depth understanding of the state's major resources and issues of human development, such as education, income, and health.</b>

**Unit- 1: Development Paradigm of Uttarakhand:** Genesis of State Formation, Main features of Uttarakhand Economy, Macroeconomic Indicators– GSDP, contribution of agriculture, industry and services in GSDP, per capita income. Economic growth and Sustainable Development. Regional disparities between Rural and Urban regions, regional disparities between hill and plain regions. Out migration, development challenges.

**Unit -2: Social Sector Development:** Demographic features, educational development-primary, secondary and higher education. Health and other basic amenities. Labour force participation and skill development, Gender issues in Uttarakhand; Poverty inequality and employment.

**Unit- 3: Agriculture Industry and Service Sector:** Agriculture- major crops, production and productivity, Organic and Natural Farming, Horticulture Development, Medicinal and Aromatic plants. Industrial development, Industrial Policies, MSMES, handloom, handicraft and micro enterprises.

**Unit-4 Infrastructure and Resources:** Urban development, Infrastructure development: Roads, bridges and Banking institutions. Water resource, Power Sector of Uttarakhand. Forest resource-major and minor forest produce, National Parks, Wildlife sanctuaries, biosphere reserves, green cover, Main rivers, Glaciers, Mineral resources, Tourism, Hospitality and wellness. Environment, ecology, climate change and prospects for green economy.

### **Teaching Learning Process: Lectures and tutorials**

#### **Suggested Readings:**

1. Govt. of India, Planning Commission 2013. Uttarakhand Development Report
2. Directorate of Economics and Statistics, Govt of Uttarakhand, Uttarakhand Statistical Diary, Various Issues
3. Directorate of Economics and Statistics, Govt of Uttarakhand, Uttarakhand At A Glance, Various Issues
4. Directorate of Economics and Statistics, Govt of Uttarakhand, Uttarakhand Annual Budget 2024,2023,2022
5. Economic Survey published by Planning Department, Uttarakhand
6. Sati, M.C: Uttarakhand Statehood: Dimensions of Development, Indus Publication New Delhi
7. Sati, M.C: Diversity and Development of Himalayan Economy

8. Development Dynamics of A Himalayan State : Volume 1 and Volume 2 , R R Nautiyal and Rajlakshmi Datta, Kalpaz Publications, Gyan Books Pvt Ltd, ISBN 978-93-86397-34-8
9. Uttarakhand Year Book: Winsar Publishing Company